## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF SALT RIVER ELECTRIC

COOPERATIVE CORPORATION (1) FOR AN ORDER

PURSUANT TO KRS 278.300 AND 807 KAR 5:001,

SECTION 11 AND RELATED SECTIONS, AUTHORIZING)

THE CORPORATION TO BORROW AN AMOUNT NOT TO

EXCEED \$2,257,000.00 FROM THE NATIONAL BANK)

FOR COOPERATIVES AND (2) FOR A CERTIFICATE

OF CONVENIENCE AND NECESSITY PURSUANT TO KRS)

278.020(1) AND 807 KAR 5:001, SECTION 9 AND

RELATED SECTIONS, AUTHORIZING CERTAIN

PROPOSED CONSTRUCTION AND ASSOCIATED CAPITAL)

OUTLAY

CASE NO. 94-359

## ORDER

Salt River Electric Cooperative Corporation ("Salt River") filed its application on October 24, 1994 for a Certificate of Public Convenience and Necessity to construct certain improvements and additions to its existing plant, and for approval to borrow \$2,257,000 from the National Bank for Cooperatives ("CoBank") and to execute notes to secure such loan.

In support of its application, Salt River filed its 1994-1995 Work Plan, which describes in detail the improvements and additions required over the next year to serve its customers. These improvements and additions are estimated to cost \$7,525,775 and will be financed by loans of \$5,268,000 from the Rural Utilities Service ("RUS"), formerly Rural Electrification Administration, \$2,257,000 from CoBank, and \$588,591 from Salt River's internally generated funds. The internally generated funds of \$588,591 were

included on REA Form 740C even though they were spent prior to the start of the work plan.

Salt River seeks authorization to construct extensions and additions to its plant as follows:

1.	New Services	\$3,300,000
2.	Transformers and Meters	1,446,900
З.	Increased Service Capacity	225,000
4.	Sectionalizing	110,000
5.	Regulators and Capacitors	185,000
6.	Ordinary Replacements	689,500
7.	Clearance Poles	324,000
8.	Security Lights	288,000
9.	Line Conversions	957,375
	TOTAL	\$7,525,775

To support its proposed construction, Salt River provided two distribution circuit analyses: one showing serious service deficiencies absent the proposed construction; the other showing adequate service being provided after completion of the Work Plan. However, further review revealed that the analysis showing adequate service was based on the Work Plan plus additional improvements not now proposed. Subsequent data requests clarified that some improvements had been completed but not incorporated into the analysis; the effects of new substations planned for after 1995 had not been incorporated; the effects of known factory closings had not been reflected; and some improvements had been indefinitely postponed.

On May 30, 1995, Salt River provided a revised analysis which more adequately reflects known changes. This revised analysis still shows some potential for service deficiencies during future

Response to Order dated November 16, 1994.

peak periods. The Commission is very concerned over this possibility but recognizes that these analyses are computer simulations of Salt River's system which may or may not be accurate.

These types of simulations are commonly used by electric utilities and are theoretically sound, but can only be as accurate as the incorporated data. A potential source of error is that although electric distribution systems are designed to handle peak loads, accurate peak demand is known only at the substation or at the locations of large power users. In a typical analysis, a recent historical peak obtained from measurements recorded at substations is selected. This peak demand is then allocated closer to customer locations based upon that month's billing records, which are directly related to average, rather than peak, demand. This involves a trial and error process for which computers are admirably suited; however, the operative term here is "trial and error." Actual field data is required to confirm the demand allocations made by the computer analysis.

Salt River provided some field measurements. However, as these measurements were taken on main feeders near or at the substations, they provide little information about the accuracy of the peak demand allocations farther out in the system, where most of the projected deficiencies may occur. Therefore, Salt River should monitor circuits where deficiencies are projected, not only to confirm the accuracy of its computer analysis, but to ensure that corrective action can be taken before any deficiency adversely

affects customer service. In its next two-year work plan, Salt River should demonstrate the accuracy of its distribution circuit analysis by providing summaries of its field measurements. If deficiencies are still projected, Salt River should provide a long range plan to correct them.

The Commission, after considering the evidence of record and being advised, finds that:

- 1. Public convenience and necessity require the construction by Salt River of the improvements and additions to its existing plan as described in its 1994-95 Work Plan, and a certificate should be granted.
- 2. The proposed loan from CoBank is for lawful objects within the corporate purposes of Salt River, is necessary and appropriate for and consistent with the proper performance by Salt River of its service to the public, and will not impair its ability to perform that service.
- 3. Salt River is capable of executing its notes as security for the loan as stated herein.
- 4. Salt River should select the interest rate program which will result in the net lowest cost to it over the term of the financing.
- 5. Within 10 days of its selection of the interest rate program, Salt River should notify the Commission in writing of the interest rate program selected and of the reasons for its selection.

- 6. The proceeds from the proposed loans should be used only for the lawful purposes set out in Salt River's application.
- 7. Salt River should include in its monthly financial report to the Commission the current interest rate on its outstanding variable rate loans.
- 8. Salt River should monitor circuits where deficiencies are projected. In its next two-year work plan, Salt River should demonstrate the accuracy of its distribution circuit analysis by providing summaries of these field measurements. If deficiencies are still projected, it should provide a long range plan to correct them.
- 9. As the issuance of securities or evidences of indebtedness subject to the control of a federal governmental agency do not require Commission approval, KRS 278.300(10), and as the RUS is an agency of the federal government, no action on Salt River's proposed loans from the RUS is required.

## IT IS THEREFORE ORDERED that:

- 1. Salt River be and it hereby is granted a Certificate of Public Convenience and Necessity to proceed with the construction and additions as set forth in its 1994-1995 Work Plan.
- 2. Salt River be and it hereby is authorized to borrow \$2,257,000 from CoBank for a 35-year period at either a fixed or variable interest rate, as chosen by Salt River, at the time the first monies are drawn from CoBank, subject to the provisions and terms of the application with respect to renegotiation of the interest rate.

- 3. Salt River be and it hereby is authorized to execute its notes as security for the loan herein authorized.
- 4. Salt River shall comply with all matters set out in Findings 4 through 8 as if they were individually so ordered.

Nothing contained herein shall be deemed a warranty or finding of value of securities or financing authorized herein on the part of the Commonwealth of Kentucky or any agency thereof.

Done at Frankfort, Kentucky, this 22nd day of June, 1995.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director